

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

DEVAL L. PATRICK Governor

TIMOTHY P. MI IRRAY Lieutenant Governor

Permit Chief

Bureau of Waste Prevention

RICHARD K. SULLIVAN JR. Secretary

> KENNETH L. KIMMELL Commissioner

DRAFT AIR QUALITY OPERATING PERMIT RENEWAL

Issued by the Massachusetts Department of Environmental Protection ("Department" or "MassDEP")

pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C. **ISSUED TO ["the Permittee"]:** INFORMATION RELIED UPON: Town of Ipswich Municipal Application No. MBR-95-OPP-001RR Electric Power Plant Transmittal No. X241580 272 High Street Transmittal No. 107465(initial) Ipswich, Massachusetts 01938 **FACILITY IDENTIFYING NUMBERS: FACILITY LOCATION:** Ipswich Municipal Electric Power Plant AO ID: 1190766 FMF FAC NO. 134053 276 High Street Ipswich, Massachusetts 01938 FMF RO NO. 52554 **NATURE OF BUSINESS: STANDARD** INDUSTRIAL CLASSIFICATION (SIC):4911 12.56 Megawatt standby/peaking power NORTH AMERICAN INDUSTRIAL generation plant CLASSIFICATION SYSYTEM (NAICS): 221112 **RESPONSIBLE OFFICIAL: FACILITY CONTACT PERSON:** Name: Jeff Turner Name: Tim Henry Title: Electric Manager Title: Plant Operator Phone: (978) 356-6635 x109 Phone: (978) 356-6640 Fax: (978) 356-6634 Fax: (978) 356-6695 Email: thenry@town.ipswich.ma.us Email: Jturner@town.ipswich.ma.us This Operating Permit shall expire on ____. For the Department of Environmental Protection, Bureau of Waste Prevention James E. Belsky

Date

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SPECIAL CONDITIONS FOR OPERATING PERMIT

PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00:Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00:Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this Permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this Permit.

A. DESCRIPTION OF FACILITY AND OPERATIONS

Ipswich Municipal Electric Power Plant ("Permittee") owns and operates an electric generating facility located at 276 High Street in Ipswich, Massachusetts. It has a capacity of 12.56 megawatts of electricity via the use of eleven (11) stationary reciprocating internal combustion engines ("RICE"). The Permittee's facility has the potential to emit fifty (50) or more tons per year of oxides of nitrogen (" NO_X "), thereby classifying it as a "major" facility subject to the Operating Permit program. Two of the RICE present on site, EU3 and EU4, have been disconnected from fuel lines since 2005 and are considered retired. Should the Permittee intend to operate said retired engines, the Permittee shall comply with applicable permitting requirements, as contained in 310 CMR 7.02, to obtain a Plan Approval from MassDEP prior to operation of either EU3 or EU4. Due to their retirement, EU3 and EU4 are not addressed further in this Operating Permit.

EU Nos. 1, 7, 8, and 10 have each operated less than 1,000 hours during every consecutive twelve month period since January 1, 1990 and therefore maintain continuous compliance with Regulation 310 CMR 7.19 NO_X Reasonably Available Control Technology ("NO_X RACT") by complying with 310 CMR 7.19(8)(d). Should any of these four EUs exceed 1,000 hours of operation during any consecutive twelve month period, then said EU(s) shall become subject to and shall comply with 310 CMR 7.19(8)(c)3.

EU Nos. 6, 11, and 12 have operated 1,000 hours or more during any consecutive twelve month period since January 1, 1990, and have demonstrated, via emissions compliance stack testing, compliance with the applicable NO_X emission standard of 9.0 grams per brake horsepower hour when firing in both Diesel and Dual Fuel modes and as such shall maintain continuous compliance with NO_X RACT by complying with 310 CMR 7.19(8)(c)3 when operating in both Diesel and Dual Fuel modes.

EU2 and EU9 have operated 1,000 hours or more during any consecutive twelve month period since January 1, 1990, and have demonstrated, via emissions compliance stack testing, compliance with the applicable NO_X emission standard of 9.0 grams per brake horsepower hour when operating in Dual Fuel mode and as such shall maintain continuous compliance with NO_X RACT, while operating in Dual Fuel mode, by complying with 310 CMR 7.19(8)(c)3.

Neither EU2 nor EU9 has demonstrated compliance with the applicable NO_X RACT emission standard of 9.0 grams per brake horsepower hour when operating in Diesel mode.

On November 9, 2012 MassDEP issued NO_X RACT Approval No. MBR-11-ECP-001 to the Permittee approving updated NO_X RACT compliance strategies and superseding those previously contained in Approval No. MBR-94-COM -040. These updated strategies include the use of NO_X

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Emission Reduction Credits when EU2 and/or EU9 operate in ULSD Diesel mode.

The Permittee's facility is also subject to federal Air Quality regulations for its combustion units. It is not a major source of Hazardous Air Pollutants (HAPs). However, the facility is an area source of HAPs, and as such, EU1,EU2, EU6, EU7, EU8, EU9, EU10, EU11, and EU12 are subject to federal regulations at 40 CFR Part 63, "National Emission Standards for Hazardous Air Pollutants," Subpart ZZZZ, "Stationary Reciprocating Internal Combustion Engines." 40 CFR Part 63 Subpart ZZZZ has a future compliance date of May 3, 2013. None of the units are subject to New Source Performance Standards at 40 CFR Part 60, Subpart IIII or Subpart JJJJ due to each of their construction dates being prior to the applicability dates contained therein. 40 CFR Part 64, "Compliance Assurance Monitoring" (CAM) is not applicable to this facility since none of the emission units uses an air pollution control device.

Tables 3, 4, 5, 6, 8, 9 and 10 of this Operating Permit contain the air quality requirements and regulations to which the Permittee's facility is subject. Table 7 of this Operating Permit contains the Air Quality requirements to which the Permittee's facility is not subject.

2. <u>EMISSION UNIT IDENTIFICATION</u>

The following emission units (Table 1) are subject to and regulated by this Operating Permit:

	Table 1		
Emission Unit (EU#)	Description of Emission Unit	EU Design Capacity in MMBtu/hr	Pollution Control Device (PCD)
EU1	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 TDD 8 1/8 (6 CYLINDER, TURBOCHARGED)	13.4	
EU2	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 DD 8 1/8 (12 CYLINDER)	14.416	
EU3	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 33-16/20 (6 CYLINDER)	9.138	
EU4	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 33-16/20 (5 CYLINDER)	7.5	
EU6	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 DD 8 1/8 (10 CYLINDER)	12.084	
EU7	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 D 8 1/8 (12 CYLINDER)	14.416	None
EU8	Cooper Bessemer stationary reciprocating internal combustion engine Model No. GSB 8 (16 CYLINDER)	12.084	
EU9	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 DD 8 1/8 (12 CYLINDER)	14.416	
EU10	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 TDD 8 1/8 (6 CYLINDER, TURBOCHARGED)	13.4	
EU11	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 TDD 8 1/8 (6 CYLINDER, TURBOCHARGED)	13.4	
EU12	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 TDD 8 1/8 (6 CYLINDER, TURBOCHARGED)	13.4	

NOTE:

MMBtu/hr = 1,000,000 British thermal units per hour

3. <u>IDENTIFICATION OF EXEMPT ACTIVITIES</u>

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

Table 2	
Description of Current Exempt Activities	Reason
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00:Appendix C(5)(h)

4. <u>APPLICABLE REQUIREMENTS</u>

A. OPERATIONAL AND/OR PRODUCTION EMISSION LIMITS AND RESTRICTIONS

The Permittee is subject to the limits/restrictions as contained in Table 3 below:

			Table 3		
EU#	Fuel/Raw Material/	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards	Applicable Regulation and/or Approval No

	Table 3				
EU#	Fuel/Raw Material/	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards	Applicable Regulation and/or Approval No
EU1, EU7, EU8, EU10	ULSD Diesel mode ¹	<1000 hours of operation during any consecutive twelve (12) month period, each unit	СО	Set and maintain the ignition timing of the engine 4 degrees retarded relative to standard timing; provided the ignition timing shall not be retarded beyond the point that: a) CO emissions concentration increases by 100 ppmvd @ 15% O2 or b) the turbocharger (as applicable) speed is increased beyond the maximum operating speed recommended by the manufacturer, or c) the exhaust port temperature increases beyond the manufacturer's recommended maximum operating temperature	310 CMR 7.19(8)(d)1.a.
		≥ 1000 hours of operation during any consecutive twelve (12) month period, each unit	NO_X	\leq 9.0 grams per brake horsepower-hour	310 CMR 7.19(8)(c)3

	Table 3					
EU#	Fuel/Raw Material/	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards	Applicable Regulation and/or Approval No	
EU1, EU10	Dual Fuel mode ²	<1000 hours of operation during any consecutive twelve (12) month period, each unit	CO	Set and maintain the ignition timing of the engine 4 degrees retarded relative to standard timing; provided the ignition timing shall not be retarded beyond the point that: a) CO emissions concentration increases by 100 ppmvd @ 15% O2 or b) the turbocharger speed is increased beyond the maximum operating speed recommended by the manufacturer, or c) the exhaust port temperature increases beyond the manufacturer's recommended maximum operating temperature	310 CMR 7.19(8)(d)1.a.	
			≥ 1000 hours of operation during any consecutive twelve (12) month period, each unit	NO_X	≤ 9.0 grams per brake horsepower-hour ⁶	310 CMR 7.19(8)(c)3
EU2, EU6, EU9, EU11, EU12	Dual Fuel mode ²	N/A	NO_X	≤ 9.0 grams per brake horsepower-hour ⁶	310 CMR 7.19(8)(c)3	
EU6, EU11, EU12	ULSD Diesel mode ¹					
EU2, EU9	ULSD Diesel mode ¹	The Permittee shall obtain and use (retire) NO _X ERCs ⁴ on an annual basis to offset all actual emissions of NO _X in excess of the applicable NO _X emission standard at 310 CMR 7.19(8)(c)3 ⁵	NO_X	\leq 9.0 grams per brake horsepower-hour ⁶	310 CMR 7.19(8)(c)3 and 310 CMR 7.19(2)(g)	

	Table 3				
EU#	Fuel/Raw Material/	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards	Applicable Regulation and/or Approval No
EU7, EU8	ULSD Diesel mode ¹				
EU1, EU2, EU6, EU9, EU10, EU11, EU12	ULSD Diesel mode ¹ , Dual Fuel mode ²	NA	Sulfur in fuel	\leq 0.0015% by weight	MBR-11-ECP- 001
	NA		Smoke	< No. 1 of Chart ⁷ , except No. 1 to < No. 2 of Chart for ≤ six (6) minutes during any one hour	310 CMR 7.06(1)(a)
Facility- Wide	. INA		Opacity	< 20 percent, except 20 to < 40 percent for ≤ two (2) minutes during any one hour	310 CMR 7.06(1)(b)
		Greenhouse gas ⁸		N/A	310 CMR 7.71 (state only)

NOTES:

- 1: ULSD Diesel mode: consisting of 100 percent ultra low sulfur distillate (ULSD) fuel firing, having a sulfur content of no more than 0.0015% by weight
- 2: Dual Fuel mode: consisting of a mixture of natural gas together with a maximum of 6 percent by weight of pilot ultra low sulfur distillate oil having a sulfur content of no more than 0.0015% by weight
- 3: $ppmvd @ 15\% O_2 = parts per million by volume, dry basis, corrected to fifteen (15) percent oxygen.$
- 4: $ERCs = Mass-based \ Emission \ Reduction \ Credits, \ as \ per 310 \ CMR \ 7.19(2)(g)$
- 5: Quantity of mass-based ERCs required to be obtained and used (retired) by the Permittee on a yearly basis shall be calculated as described in Table 4 below
- 6: Based on a one-hour average
- 7. Chart means the Ringelmann Scale for grading the density of smoke, as published by the United States Bureau of Mines and as referred to in the Bureau of Mines Information Circular No. 8333, or any smoke inspection guide approved by MassDEP
- 8: Greenhouse Gas means any chemical or physical substance that is emitted into the air and that the department may reasonably anticipate will cause or contribute to climate change including, but not limited to, CO₂, CH₄, N₂O, SF₆, hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs)

KEY:

EU# = Emission Unit Number CO = Carbon monoxide $NO_X = Oxides of Nitrogen$ % = percent $O_2 = Oxygen$ < = less than

 \leq = less than or equal to \geq = equal to or greater than

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Table 3:

	Table 4
EU#	Monitoring And Testing Requirements

	Table 4
EU#	Monitoring And Testing Requirements
	1. As referenced in Approval No. MBR-11-ECP-001 at least once every three years the Permittee shall inspect and maintain the ignition timing for each of these four engines to a condition of four degrees retarded relative to standard timing, in accordance with the procedure contained in Regulation 310 CMR 7.19(8)(d) provided the ignition timing shall not be retarded beyond the point that: a. the CO emission concentration increases beyond 100 parts per million (ppm) by volume, dry, corrected to 15% O ₂ , or b. the turbocharger speed is increased beyond the maximum operating speed recommended by the manufacturer, or c. the exhaust port temperature increases beyond the manufacturer's recommended maximum operating temperature.
EU1, EU7, EU8,	2. As referenced in Approval No. MBR-11-ECP-001 determine the hours of operation for each engine for the previous twelve month period on a monthly basis by maintaining an elapsed time meter on each of the four subject engines to indicate, in cumulative hours, the elapsed engine operating time of each of the four subject engines for the previous twelve months as provided in 310 CMR 7.19(8)(d).
EU10	3. As referenced in Approval No. MBR-11-ECP-001 prior to operating any of the four subject engines over 1,000 hours in any consecutive twelve month period, perform Emission Compliance Testing (stack testing) to demonstrate the ability of the unit to meet the applicable NO _X RACT emission standard of 9.0 grams per brake horsepower hour in both ULSD Diesel and Dual Fuel, as applicable, modes as provided in 310 CMR 7.19(13)(c). Said stack testing shall be conducted in accordance with the EPA test methodologies set forth in Code of Federal Regulations Title 40 CFR Part 60, Appendix A or other methods approved by MassDEP and EPA as provided in 310 CMR 7.19(13)(c)3.
	4. As referenced in Approval No. MBR-11-ECP-001 construct appropriate testing ports if it is anticipated that any of the four (4) engines could possibly exceed 1,000 hours of operation in any consecutive twelve month period. These testing ports shall be constructed so as to accommodate the emissions testing requirements as stipulated in Code of Federal Regulations Title 40 CFR Part 60, Appendix A or other method approved by MassDEP and EPA.

	Table 4
EU#	Monitoring And Testing Requirements
	5. As referenced in Approval No. MBR-11-ECP-001 the Permittee shall monitor by calculating on a monthly basis the quantity of ERCs necessary to be obtained and used (retired) for EU2 to comply with the applicable NO_X RACT emission limit of 9.0 grams per brake horsepower hour, when operating in ULSD Diesel mode, according to the following formula: $ERC_{NOx/month} = \left[(AcE_{NOx})(MMBtu_{month}) - (AlE_{NOx})(MMBtu_{month}) \right] $ where: $ERC_{NOx/month} = \left[(AcE_{NOx})(MMBtu_{month}) - (AlE_{NOx})(MMBtu_{month}) \right] $ where: $ERC_{NOx/month} = \left[(AcE_{NOx})(MMBtu_{month}) - (AlE_{NOx})(MMBtu_{month}) \right] $ obtained and used (retired) for EU2 compliance with NO_X RACT in
EU2	pounds per month, certified by MassDEP under 310 CMR 7.00: Appendix $B(3)$ AcE _{NOx} = the actual NO _x emissions of 3.01 pounds per MMBtu input for EU2 firing in ULSD Diesel mode (based on emissions compliance testing performed on July 13 and 14, 1995)
	$AlE_{NOx} = \qquad \qquad \text{the allowable NO}_X \text{ emissions equivalent of } 2.31 \text{ pounds per MMBtu, on an input basis, of the applicable NO}_X \text{ RACT emission standard of } 9.0 \text{ grams per brake horsepower hour} $ $MMBtu_{month} = \text{the quantity of million British thermal units per hour (MMBtu) fired in EU2 per month}$
	6. As referenced in Approval No. MBR-11-ECP-001 the amount of monthly ERCs calculated by the above formula for EU2 shall be summed, from January through December of each year, to arrive at a yearly ERC value needed for EU2 NO _X RACT compliance. The Permittee shall comply with 310 CMR 7.00: Appendix B(3)(e) regarding the withdrawal, transfer, and use of ERCs. In accordance with 310 CMR 7.00: Appendix B(3)(e)2., the Permittee shall obtain an amount of credit equal to five (5) percent more than the amount needed for compliance calculation. Therefore, the amount of ERCs required to be obtained and used (retired) shall be calculated according to the following formula and rounded to the nearest whole number:
EU2	$ERC_{NOx/year} = \sum_{Jan}^{Dec} \sum ERC_{NOx/month} *(1.05)$ The Permittee shall calculate and monitor the total amounts of ozone season (May 1 through September 30) and non-ozone season (October 1 through April 30) ERCs that are necessary for EU2 compliance with NO _X RACT, and obtain and use (or retire) ERCs in accordance with the provisions of 310 CMR 7.00: Appendix B(3)(e)8. In accordance with 310 CMR 7.00: Appendix B(3)(e)8, NO _X ERCs generated during the ozone control period of May 1 through September 30 can be used for compliance at any time during the year. However, NO _X ERCs generated during the non-ozone control period of October 1 through April 30 shall only be used for compliance in the same season as generated (October 1 through April 30).

	Table 4
EU#	Monitoring And Testing Requirements
	7. As referenced in Approval No. MBR-11-ECP-001 the Permittee shall monitor by calculating on a monthly basis the amount of ERCs necessary to be obtained and used (retired) for EU9 to comply with the applicable NO _X RACT emission limit of 9.0 grams per brake horsepower hour, when operating in ULSD Diesel mode, according to the following formula:
	$ERC_{NOx/month} = [(AcE_{NOx})(MMBtu_{month}) - (AlE_{NOx})(MMBtu_{month})]$
EU9	$ERC_{NOx/month} = \begin{array}{c} where: \\ ERC_{NOx/month} = & federally \ enforceable \ NO_X \ Emission \ Reduction \ Credits \ required \ to \ be \\ obtained \ and \ used \ (retired) \ for \ EU9 \ compliance \ with \ NO_X \ RACT \ in \\ pounds \ per \ month, \ certified \ by \ MassDEP \ under \ 310 \ CMR \ 7.00: \ Appendix \ B(3) \end{array}$
	AcE_{NOx} = the actual NO_X emissions of 2.65 pounds per MMBtu input for EU9 firing in ULSD Diesel mode (based on emissions compliance testing performed on July 13 and 14, 1995)
	AlE_{NOx} = the allowable NO_X emissions equivalent of 2.31 pounds per MMBtu, on an input basis, of the applicable NO_X RACT emission standard of 9.0 grams per brake horsepower hour
	MMBtu _{month} = the quantity of million British thermal units per hour (MMBtu) fired in EU9 per month
	8. As referenced in Approval No. MBR-11-ECP-001 the amount of monthly ERCs calculated by the above formula for EU9 shall be summed, from January through December of each year, to arrive at a yearly ERC value needed for EU9 NO _x RACT compliance. The Permittee shall comply with 310 CMR 7.00: Appendix B(3)(e) regarding the withdrawal, transfer, and use of ERCs. In accordance with 310 CMR 7.00: Appendix B(3)(e)2., the Permittee shall obtain an amount of credit equal to five (5) percent more than the amount needed for compliance calculation. Therefore, the amount of ERCs required to be obtained and used (retired) per calendar year shall be calculated according to the following formula and rounded to the nearest whole number:
EU9	$ERC_{NOx/year} = \sum_{J_{an}}^{Dec} \sum_{ERC_{NOx/month}}^{Dec} *(1.05)$
	The Permittee shall calculate and monitor the total amounts of ozone season (May 1 through September 30) and non-ozone season (October 1 through April 30) ERCs that are necessary for EU9 compliance with NO _X RACT, and obtain and use (or retire) ERCs in accordance with the provisions of 310 CMR 7.00: Appendix B(3)(e)8. In accordance with 310 CMR 7.00: Appendix B(3)(e)8, NO _X ERCs generated during the ozone control period of May 1 through September 30 can be used for compliance at any time during the year. However, NO _X ERCs generated during the non-ozone control period of October 1 through April 30 shall only be used for compliance in the same season as generated (October 1 through April 30).
EU2, EU9	9. As referenced in Approval No. MBR-11-ECP-001 monitor to ensure compliance with 310 CMR 7.19(2)(g) by obtaining and using (retiring) sufficient ERCs, as necessary for compliance, on or before January 30 th of each year.
EU1, EU2, EU6, EU7, EU8,	10. As referenced in Approval No. MBR-11-ECP-001 submit a pretest protocol to this Office, attention BWP Permit Chief, at least 60 days prior to the anticipated date of any required stack test, for review and written approval as provided in 310 CMR 7.19(13)(c)1. Include a description of sampling point locations, sampling equipment, sampling and analytical procedures, and the operating conditions for the required testing in the pretest protocol as provided in 310 CMR 7.19(13)(c)2.

	Table 4
EU#	Monitoring And Testing Requirements
EU9, EU10, EU11, EU12	11. As referenced in Approval No. MBR-11-ECP-001 all emissions testing if and when requested by MassDEP or EPA, shall be conducted in accordance with the EPA Reference Test Methods, which are found in 40 CFR 60, Appendix A. All testing must also be conducted by the methods outlined in 310 CMR 7.13(1)(a) - (d) and as required by MassDEP.
	 12. As referenced in Approval No. MBR-11-ECP-001 for each emission unit, measure on a daily basis: a) the quantity and type of fuel(s) burned each day, b) heat content of each fuel, c) the total heating value of the fuel consumed for each day, and d) the allowable emission rate as provided in 310 CMR 7.19(13)(d)3.
	13. As referenced in Approval No. MBR-11-ECP-001 monitor the sulfur content of each new shipment of ULSD fuel oil received. Compliance with the sulfur content limitation can be demonstrated through testing or maintaining a shipping receipt from the fuel supplier. The shipment certification or testing of sulfur content of ULSD fuel oil shall be in accordance with the applicable American Society for Testing Materials (ASTM) test methods or any other method approved by MassDEP and EPA.
	14. As referenced in Approval No. MBR-11-ECP-001 opacity shall be determined in accordance with EPA Test Method 9, as specified in 40 CFR 60, Appendix A, if and when requested by MassDEP or EPA.
	15. In accordance with 310 CMR 7.13(1), any person owning, leasing, operating or controlling a facility for which MassDEP has determined that stack testing is necessary to ascertain compliance with MassDEP's regulations or design approval provisos shall cause such stack testing: (a) to be conducted by a person knowledgeable in stack testing, (b) to be conducted in accordance with procedures contained in a test protocol which has been approved by MassDEP, and (c) to be conducted in the presence of a representative of MassDEP when such is deemed necessary, and (d) to be summarized and submitted to MassDEP with analyses and report within such time as agreed to in the approved test protocol.
Facility -wide	16. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), monitor operations so that the occurrence of any upset or malfunction of any equipment can be identified so compliance with the deviation reporting requirement in Table 6 of this Permit can be maintained.
	17. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), monitor facility operations such that information may be compiled for the annual preparation of a Source Registration/Emission Statement Form as required for compliance with 310 CMR 7.12.
	18. In accordance with 310 CMR 7.71(1) and 310 CMR 7.00: Appendix C(9) establish and maintain data systems or record keeping practices (e.g. fuel use records, SF6 usage documentation, Continuous Emissions Monitoring System) for greenhouse gas emissions to ensure compliance with the reporting provisions of M.G.L. c. 21N, the Climate Protection and Green Economy Act, St. 2008, c. 298, § 6. (State only requirement) 19. Comply with all applicable monitoring and testing requirements contained in 40 CFR Part 63,
	Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants," Subpart ZZZZ, "Stationary Reciprocating Internal Combustion Engines."

Table 5	
EU#	Record Keeping Requirements

	Table 5		
EU#	Record Keeping Requirements		
EU1, EU7, EU8, EU10	1. As referenced in Approval No. MBR-11-ECP-001 maintain records of the cumulative hours of operation of each of the four (4) subject engines on both a monthly basis as well as for each twelve month consecutive period on site, for a period of the five most recent years.		
	2. As referenced in Approval No. MBR-11-ECP-001 maintain on site, for a period of the five most recent years, records to certify that the ignition timing of each of the four (4) subject engines has been inspected and adjusted at least once every three (3) years as provided in 310 CMR 7.19(8)(d)5.		
EU2, EU9	3. As referenced in Approval No. MBR-11-ECP-001 on both a monthly and calendar year basis calculate and record the allowable NO_X emissions (AlE_{NO_X}) from each EU, in pounds, based on the applicable NO_X RACT emission standard of 9.0 grams per brake horsepower hour. In addition, the Permittee shall determine and record on a monthly and calendar year basis, in pounds, the actual NO_X emissions (AcE_{NO_X}) from each EU and the difference between actual and allowable NO_X emissions for each EU.		
	4. As referenced in Approval No. MBR-11-ECP-001 record, if necessary, the quantity of NO_X Emission Reduction Credits (ERC $_{NO_X}$), in pounds per month and pounds per calendar year, required to comply with NO_X RACT. Said ERC records shall contain the total amounts of ozone season (May 1 through September 30) and non-ozone season (October 1 through April 30) ERCs that were required to be obtained and used (retired) for compliance with NO_X RACT on a calendar year basis.		
	5. As referenced in Approval No. MBR-11-ECP-001 maintain records that identify the source of any ERCs obtained, including company name, emission unit and method of generation, date of generation, the Transmittal Number of the Application for certification of ERCs and the date of retirement of said ERCs.		
	6. As referenced in Approval No. MBR-11-ECP-001 maintain records of the results of any Emissions Compliance Testing (Stack Testing) so that a summary may be reported to MassDEP as required by 310 CMR 7.13(1)(d).		
EU1, EU2, EU6,	7. As referenced in Approval No. MBR-11-ECP-001 for each emission unit maintain on site, for a period of the five most recent years, records of the types of fuel(s) burned each day, quantity of each type of fuel burned, heat content of each fuel, the total heating value of the fuel consumed for each day, and the allowable emission rate as provided in 310 CMR 7.19(13)(d)3.		
EU0, EU7, EU8, EU9, EU10, EU11,	8. As referenced in Approval No. MBR-11-ECP-001 maintain fuel purchase records in order to demonstrate compliance with the fuel sulfur content limitations in Table 3 of this Permit. Maintain all records and copies of fuel supplier certifications or fuel oil analyses on site for a period of five (5) years. The records shall be submitted to MassDEP within ten (10) days of request by MassDEP or EPA.		
EU12	9. As referenced in Approval No. MBR-11-ECP-001 maintain a record of all EPA Test Method 9 opacity determinations including the date, the name of the Method 9 certified observer, and the determinations made.		
	10. As referenced in Approval No. MBR-11-ECP-001 maintain on-site a copy of the Standard Operating and Maintenance Procedure (SOMP) for the facility.		
Facility wid-	11. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), maintain records of facility operations such that information may be reported as required for compliance with 310 CMR 7.12, "Source Registration" incorporated herein by reference.		
Facility-wide	12. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), keep copies of all information supplied to MassDEP pursuant to 310 CMR 7.12 on site for five (5) years after the date the report is submitted.		
Facility-wide	13. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), maintain a record of the occurrence (s) of upsets or malfunctions of facility equipment so that the deviation report required in Table 6 can be submitted.		

	Table 5		
EU#	Record Keeping Requirements		
	14. Maintain records of all monitoring data and supporting information on site for a period of at least five (5) years from the date of the monitoring sample, measurement, report or Operating Permit renewal application. Supporting information includes at a minimum, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit, and any other information required to interpret the monitoring data. Records required to be maintained shall include, where applicable:		
	1.	The date, place as defined in the Permit, and time of sampling or measurements;	
	2.	The date(s) analyses were performed;	
	3.	The company or entity that performed the analyses;	
	4.	The analytical techniques or methods used;	
	5.	The results of such analyses; and	
	6.	The operating conditions as existing at the time of sampling or measurement	
	as provided in 310 CMR 7.00:Appendix C(10)(b) incorporated herein by reference.		
	available to the	nce with 310 CMR 7.71 (6) b. and c. retain at the facility for five years and make e Department upon request copies of the documentation of the methodology and data fy emissions. (State only requirement)	
		ith all applicable record keeping requirements contained in 40 CFR Part 63, "National dards for Hazardous Air Pollutants," Subpart ZZZZ, "Stationary Reciprocating Internal ngines."	

Table 6		
EU#	Reporting Requirements	
EU1, EU7, EU8, EU10	1. Submit a pretest protocol to this Office, attention BWP Permit Chief, at least 60 days prior to the anticipated date of any required stack test, for review and written approval as provided in 310 CMR 7.19(13)(c)1. Include a description of sampling point locations, sampling equipment, sampling and analytical procedures, and the operating conditions for the required testing in the pretest protocol as provided in 310 CMR 7.19(13)(c)2.	
	2. A compliance test results report shall be submitted to MassDEP, attention BWP Permit Chief, no later than 60 days after the completion of the stack test and before any of the four (4) subject engines has exceeded 1,000 hours of operation in any consecutive twelve (12) months.	
	3. In accordance with 310 CMR 7.19(8)(d)4., notify MassDEP if the operation of any of the four (4) subject engines exceeds 1,000 hours for any consecutive twelve month period within three (3) business days.	

Table 6			
EU#	Reporting Requirements		
	4. As referenced in Approval No. MBR-11-ECP-001 submit in writing to MassDEP, by February 15 th of each year, a summary showing the following for each of the subject engines:		
	a) monthly actual emissions for the previous year,		
	b) monthly allowable emissions for the previous year,		
	c) the previous year's actual emissions,		
EU2,	d) the previous year's allowable emissions,		
EU2, EU9	e) quantity of ERCs required to be obtained and used (retired) per year including a breakdown of the ozone season and non- ozone season ERCs,		
	f) quantity of ERCs obtained and used (retired),		
	g) source of the ERCs obtained and used (retired), including facility name, emission unit and method of generation, and the transmittal number for the Application for certification of ERCs, and		
	h) The date that the required ERCs were obtained and used (retired).		
EU1, EU2, EU6, EU7, EU8,	5. Submit the emission test report to this Office, attention BWP Permit Chief, for review and written MassDEP approval within 60 days of the completion of the compliance stack testing as provided in 310 CMR 7.19(13)(c)6.		
EU9, EU10, EU11, EU12	6. In accordance with 310 CMR 7.19(13)(d)9, submit compliance records within ten (10) days of written request by MassDEP or EPA.		

- 7. Upon MassDEP's request, any record relative to the Operating Permit or to the emissions of any air contaminant from the facility shall be submitted to MassDEP within 30 days of the request by MassDEP or within a longer time period if approved in writing by MassDEP, and shall be transmitted on paper, on computer disk, or electronically at the discretion of MassDEP, pursuant to 310 CMR 7.00: Appendix C(10)(a) incorporated herein by reference.
- 8. Promptly report to MassDEP all instances of deviations from Permit requirements by telephone or fax, within three days of discovery of such deviation, as provided in 310 CMR 7.00: Appendix C(10)(f), incorporated herein by reference and General Condition No. 25 of this Permit.

Facility-Wide

- 9. In accordance with 310 CMR 7.00: Appendix C(10)(h) all required reports must be certified by a responsible official consistent with 310 CMR 7.00: Appendix C(5)(c).
- 10. Submit a Source Registration/Emission Statement Form to MassDEP on an annual basis as required by 310 CMR 7.12.
- 11. In accordance with 310 CMR 7.13(1) and 7.13(2), if determined by the Department that stack testing is necessary to ascertain compliance with the Department's regulations or design approval provisos shall cause such stack testing to be summarized and submitted to the Department as prescribed in the agreed to pretest protocol.
- 12. In accordance with 310 CMR 7.00: Appendix C(10)(c). the Permittee shall report a summary of all monitoring data and related supporting information to MassDEP at least every six months (by January 30 and July 30 of each calendar year).

	Table 6		
	EU#	Reporting Requirements	
		an Annual Compliance report to MassDEP and EPA by January 30 of each year and by General Condition 10 of this Permit.	
Facility-Wide	14. In accordance with 310 CMR 7.71(5), by April 15 th , 2010 and April 15 th of each year thereafter report emissions of greenhouse gases from stationary emissions sources including, but not limited to, emissions from factory stacks, manufacturing processes and vents, fugitive emissions, and other process emissions; and owned or leased motor vehicles when stationary source greenhouse gas emissions are greater than 5,000 short tons CO2e. Report greenhouse gas emissions electronically in a format that can be accommodated by the registry. (State only requirement)		
	form provided form form form form form form for the form form form form form form form form	ordance with 310 CMR 7.71(6), certify greenhouse gas emissions reports using a ded by the Department or the registry. (State only requirement) ordance with 310 CMR 7.71(7), by December 31 st of the applicable year submit to the at documentation of triennial verification of the greenhouse gas emissions report.	
	Emission S	y with all applicable reporting requirements contained in 40 CFR Part 63, "National tandards for Hazardous Air Pollutants," Subpart ZZZZ, "Stationary Reciprocating mbustion Engines."	

C. GENERAL APPLICABLE REQUIREMENTS

The Permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et seq. and 310 CMR 8.00 et. seq., when subject.

D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The Permittee is currently not subject to the following requirements:

	Table 7
Regulation	Reason
310 CMR 7.16: Reduction of Single Occupant Commuter Vehicle Use	Facility employs less than 250 people
40 CFR 64: Compliance Assurance Monitoring Rule	None of the emission units uses a pollution control device

5. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to and shall comply with the following special terms and conditions that are not contained in Table 3, 4, 5, and 6:

Table 8.		
Special Terms and Conditions		
EU1, EU2, EU6,	1. Emission Unit Nos. EU1, EU2, EU6, EU7, EU8, EU9, EU10, EU11, and EU12 are subject to the requirements of 40 CFR 63.1-15, Subpart A, "General Provisions" (as specifically indicated in Table 8 to Subpart ZZZZ of 40 CFR 63). Compliance with all applicable provisions therein is required.	
EU7, EU8, EU9, EU10, EU11, EU12	2. The Permittee shall operate EU1, EU2, EU6, EU7, EU8, EU9, EU10, EU11, and EU12 in compliance with all applicable requirements and associated compliance dates contained in 40 CFR Part 63 Subpart ZZZZ "Reciprocating Internal Combustion Engines."	
EU1, EU7, EU8, EU10	3. Should EU1, EU7, EU8 or EU10 operate 1,000 hours or more individually during any consecutive twelve month period, then said EU(s) shall become subject to and shall comply with 310 CMR 7.19(8)(c)3.	
	4. Final Modified NO _X RACT ECP Approval No. MBR-11-ECP-001, issued on November 9, 2012 superseded Approval No. MBR-94-COM-040, issued May 31, 1995, in its entirety.	
	5. As referenced in Final Modified NO _X RACT ECP Approval No. MBR-11-ECP-001, within sixty (60) days of receipt of Approval No. MBR-11-ECP-001 the Permittee shall obtain, from the current owner of approved NO _X ERC that have not been previously converted or retired, and hold at a minimum 1 ton of ozone-season NO _X Emission Reduction Credits (ERC). Further, the Permittee shall provide MassDEP with written confirmation that said purchase has occurred. Said written confirmation must show the original transmittal and approval number under which the ozone-season NO _X ERC generation was approved.	
Facility-Wide	 As referenced in Final Modified NO_X RACT ECP Approval No. MBR-11-ECP-001, the purchase and retirement of all required ERC(s) shall be completed on a calendar year basis on or before every January 30 of the following year. As referenced in Final Modified NO_X RACT ECP Approval No. MBR-11-ECP-001, the routine monitoring of generator station power production performed for NEPOOL shall serve as backup documentation of engine usage. This information shall be used to verify the elapsed timer meter readings, and shall also provide a backup method for estimating the duration of engine usage for 	
	any periods when the elapsed timer may be out-of-service. 8. As referenced in Final Modified NO _X RACT ECP Approval No. MBR-11-ECP-001, the Permittee shall maintain a copy of the Standard Operating and Maintenance Procedures (SOMP) for the NO _X RACT subject combustion units on-site at all times. Updated versions of the SOMP shall be submitted to MassDEP. MassDEP must approve of significant changes to the SOMP prior to the change becoming effective. The updated SOMP shall supersede prior versions of the SOMP. 9. The Permittee is subject to, and has stated in their Operating Permit application, Transmittal	
	Number X241580, that the Permittee is in compliance with the requirements of 40 CFR 82: Protection of Stratospheric Ozone. These requirements are applicable to this facility and the United States Environmental Protection Agency enforces these requirements.	

6. <u>ALTERNATIVE OPERATING SCENARIOS</u>

The Permittee did not request alternative operating scenarios in its Operating Permit application.

Alternative Operating Scenarios

7. EMISSIONS TRADING

Table 10.

Emissions Trading

A. INTRA-FACILITY EMISSION TRADING

The Permittee did not request intra-facility emissions trading in its Operating Permit application.

B. INTER-FACILITY EMISSION TRADING

The Permittee did not request inter-facility emissions trading in its Operating Permit application.

8. COMPLIANCE SCHEDULE

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the Permit term.

FACILITY WIDE:

1) The Permittee shall submit a completed revised Operating Permit Renewal Application to the Massachusetts Department of Environmental Protection, Northeast Regional Office, Bureau of Waste Prevention – Attention Permit Chief, 205B Lowell Street, Wilmington, MA 01887 and to the United States Environmental Protection Agency, Region I-New England, 5 Post Office Square, Suite 100, Mail Code OEP05-2, Boston, MA 02109-3912, Attention: Ida E. McDonnell, Manager. The completed revised Operating Permit Renewal Application shall include all Emission Units and applicable state and federal air quality requirements specifically including, but not limited to, those contained in 40 CFR Part 63 and 40 CFR Part 82. In addition the completed revised Operating Permit Renewal Application shall include a new signed and dated certification page and shall be submitted in writing on or before April 1, 2013.

GENERAL CONDITIONS FOR OPERATING PERMIT

9. <u>FEES</u>

The Permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

10. COMPLIANCE CERTIFICATION

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit Reporting Kit" is available to the Permittee via the MassDEP's web site, http://www.mass.gov/dep/air/approvals/aqforms.htm#op.

A. Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this Operating Permit. The report shall be postmarked or delivered by January 30 to the MassDEP and to the Regional Administrator, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification:
- 2) the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- 4) any additional information required by the MassDEP to determine the compliance status of the source.

B. Semi-Annual Monitoring Summary Report and Certification

The Responsible Official shall certify, semi-annually on the calendar year, that the facility is in compliance with the requirements of this Permit. The report shall be postmarked or delivered by January 30 and July 30 to the MassDEP. The report shall be submitted in compliance with the

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submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- 4) whether there were any deviations during the reporting period;
- 5) if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- 6) whether deviations in the reporting period were previously reported;
- 7) if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- 8) if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
- 9) any additional information required by the MassDEP to determine the compliance status of the source.

11. NONCOMPLIANCE

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for Permit termination or revocation, or for denial of an Operating Permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

12. PERMIT SHIELD

A. This facility has a permit shield provided that it operates in compliance with the terms and conditions of this Permit. Compliance with the terms and conditions of this Permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the Permittee's application and as identified in this Permit.

Where there is a conflict between the terms and conditions of this Permit and any earlier approval or Permit, the terms and conditions of this Permit control.

- B. The MassDEP has determined that the Permittee is not currently subject to the requirements listed in Section 4, Table 7.
- C. Nothing in this Permit shall alter or affect the following:
 - 1) the liability of the source for any violation of applicable requirements prior to or at the time of

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Permit issuance.

- 2) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
- 3) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

13. ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A

All other terms and conditions contained in this Permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

14. PERMIT TERM

This Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date 5 years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this Permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

15. PERMIT RENEWAL

Upon the MassDEP's receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the Operating Permit renewal application prior to this Permit's expiration date, this Permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

16. <u>REOPENING FOR CAUSE</u>

This Permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the facility may request that the MassDEP terminate the facility's Operating Permit for cause. The MassDEP will reopen and amend this Permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the Permittee for an Operating Permit revision, revocation and reissuance, or

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termination, or a notification of a planned change or anticipated noncompliance does not stay any Operating Permit condition.

17. DUTY TO PROVIDE INFORMATION

Upon the MassDEP's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the MassDEP copies of records that the Permittee is required to retain by this Permit.

18. <u>DUTY TO SUPPLEMENT</u>

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The Permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

19. TRANSFER OF OWNERSHIP OR OPERATION

This Permit is not transferable by the Permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the Permit is necessary and provided that a written agreement containing a specific date for transfer of Permit responsibility, coverage and liability between current and new Permittee, has been submitted to the MassDEP.

20. PROPERTY RIGHTS

This Permit does not convey any property rights of any sort, or any exclusive privilege.

21. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

- A. enter upon the Permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this Permit:
- B. have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- C. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

D. Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the Operating Permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

22. PERMIT AVAILABILITY

The Permittee shall have available at the facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the Operating Permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

23. SEVERABILITY CLAUSE

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

24. <u>EMERGENCY CONDITIONS</u>

The Permittee shall be shielded from enforcement action brought for noncompliance with technology based emission limitations specified in this Permit as a result of an emergency². In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. an emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- B. the permitted facility was at the time being properly operated;
- C. during the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- D. the Permittee submitted notice of the emergency to the MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

¹ Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

² An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

25. PERMIT DEVIATION

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to Section 24 of this Permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6. of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Waste Prevention the following deviations from permit requirements, by telephone, fax or electronic mail (e-mail), within three (3) days of discovery of such deviation:

- A. Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- B. Exceedances of parameter limits established by your Operating Permit or other approvals, where the parameter limit is identified by the Permit or approval as surrogate for an emission limit.
- C. Exceedances of Permit operational limitations directly correlated to excess emissions.
- D. Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.
- E. Failure to perform QA/QC measures as required by your Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the MassDEP Bureau of Waste Prevention Air Operating Permit Reporting Kit, which is available to the Permittee via the MassDEP's web site, http://www.mass.gov/dep/air/approvals/agforms.htm#op.

This report shall include the deviation, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone, fax or electronic mail (e-mail) within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

26. OPERATIONAL FLEXIBILITY

The Permittee is allowed to make changes at the facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the Permit and in compliance with all applicable requirements provided the Permittee gives the EPA and the MassDEP written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's Permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

27. MODIFICATIONS

- A. Administrative Amendments The Permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).
- B. Minor Modifications The Permittee may make changes at the facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2.,provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).
- C. Significant Modifications The Permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).
- D. No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this Operating Permit. A revision to the Permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an Operating Permit revision under any other applicable requirement.

28. OZONE DEPLETING SUBSTANCES

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

- A. The Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - 1) All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.
 - 2) The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.
 - 3) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.
 - 4) No person may modify, remove or interfere with the required warning statement except as described in 40 CFR 82.112.
- B. The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:
 - 1) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices of 40 CFR 82.156.

- 2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment of 40 CFR 82.158.
- 3) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
- 4) Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.
- 5) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair equipment requirements of 40 CFR 82.156.
- 6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- C. If the Permittee manufactures, transforms, imports or exports a class I or class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part82, Subpart A, "Production and Consumption Controls".
- D. If the Permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners". The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.
- E. The Permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

29. PREVENTION OF ACCIDENTAL RELEASES

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

Your facility is subject to the requirements of the General Duty Clause, under 112(r)(1) of the CAA Amendments of 1990. This clause specifies that owners or operators of stationary sources producing, processing, handling or storing a chemical in any quantity listed in 40 CFR Part 68 or any other extremely hazardous substance have a general duty to identify hazards associated with these substances and to design, operate and maintain a safe facility, in order to prevent releases and to minimize the consequences of accidental releases which may occur.

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